

PATENT
910000-2020AMENDMENTIn the Claims

1. (Currently Amended) A method for treating a disorder characterized by excessive proliferation of tissue treatable by an anti-angiogenic molecule in a subject in need thereof comprising implanting a cell-matrix structure in an amount effective to inhibit or regress the excessive tissue proliferation, wherein said cell-matrix structure comprises a matrix having attached thereto cells that stably expressing a gene encoding an anti-angiogenic molecule in an amount effective to inhibit or regress the excessive tissue proliferation.
2. (Currently Amended) The method of claim 1 wherein the disorder is selected from the group consisting of malignant and benign neoplasias, vascular, inflammatory conditions causing excessive proliferation of cells, ~~keloid formation, intraperitoneal or intrathoracic adhesions~~, endometriosis, congenital or endocrine abnormalities, psoriasis, unwanted skin proliferation, rheumatoid arthritis, ~~multiple sclerosis~~, unwanted angiogenesis of the eye, restenosis, and infections causing excessive proliferation of cells.
3. (Original) The method of claim 1 wherein the matrix is selected from the group consisting of fibrous scaffolds, polymeric hydrogels, and micromachine or micromolded substrates.
4. (Original) The method of claim 1 wherein the cells are selected from the group consisting of fibroblasts, tissue specific cells, progenitor cells, and stem cells.
5. (Previously Amended) The method of claim 1 wherein the cells are genetically engineered to produce the anti-angiogenic molecule.
6. (Currently Amended) The method of claim 1 wherein the anti-angiogenic molecule is ~~thrombomodulin~~ TSP-2.

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7. (Original) The method of claim 1 wherein the anti-angiogenic molecule is endogenous to the cells on the matrix and the cells are engineered to increase expression of the anti-angiogenic molecule.

8-15. (Canceled)

16. (Currently Amended) A method for treating a disorder characterized by excessive proliferation of tissue treatable by an anti-angiogenic molecule in a patient in need thereof comprising implanting a cell-matrix structure in an amount sufficient to stop or regress the excessive tissue proliferation, wherein said the cell-matrix structure comprises a matrix having attached thereto cells that stably expressing a gene encoding a thrombospondin-2 (TSP-2) in an amount sufficient to stop or regress the excessive tissue proliferation.

17. (Currently Amended) The method of claim 16, wherein the disorder is selected from the group consisting of malignant and benign neoplasias, vascular, inflammatory conditions causing excessive proliferation of cells, ~~keloid formation, intraperitoneal or intrathoracic adhesions~~, endometriosis, congenital or endocrine abnormalities, psoriasis, unwanted skin proliferation, rheumatoid arthritis, ~~multiple sclerosis~~, unwanted angiogenesis of the eye, restenosis, and infections causing excessive proliferation of cells.

18. (Previously Added) The method of claim 16, wherein the matrix is selected from the group consisting of fibrous scaffolds, polymeric hydrogels, and micromachine or micromolded substrates.

19. (Previously Added) The method of claim 16, wherein the cells are selected from the group consisting of fibroblasts, tissue specific cells, progenitor cells, and stem cells.

20. (Previously Added) The method of claim 16, wherein the cells are genetically engineered to produce TSP-2.

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21. (Previously Added) The method of claim 16, wherein TSP-2 is endogenous to the cells on the matrix and the cells are engineered to increase expression of TSP-2.

22. (Previously Added) The method of claim 16 wherein the cells are of a different cell type than the tissue that has proliferated.

23. (Previously Added) The method of claim 16 wherein the cells are selected based on natural production of TSP-2.

24. (Previously Added) The method of claim 1 wherein the cells are of a different cell type than the tissue that has proliferated.

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25. (Previously Added) The method of claim 1 wherein the cells are selected based on natural production of the anti-angiogenic molecule.

26. (Previously Added) The method of claim 1 wherein the anti-angiogenic molecule is thrombomodulin.

27. (Previously Added) The method of claim 1 wherein the anti-angiogenic molecule is angiostatin.

28. (Previously Added) The method of claim 1 wherein the anti-angiogenic molecule is endostatin.

29. (Previously Added) The method of claim 1 wherein the anti-angiogenic molecule is TSP-1.